

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

### **Listing of Claims:**

Claim 1 (currently amended): A method for determining the endpoint of a chemical mechanical polish process, comprising:

providing a semiconductor wafer with a polish surface;

mounting said wafer adjacent a reference surface;

polishing said polish surface using a chemical mechanical polishing process;

sequentially exposing said polish surface and said reference surface to a light source;

at a first time  $t_0$ , measuring a signal  $S_x$  from said polish surface;

at a second time  $t_1$  following  $t_0$ , measuring a signal  $S_B$  from said reference surface;

deriving a signal  $S_{tx}$  given by  $S_{tx} = f(S_x, S_B)$ ; and

determining an endpoint of said chemical mechanical polishing process when the derived signal  $S_{tx}$  equals a predetermined level.

Claim 2 (canceled)

Claim 3 (original): The method of claim 2 wherein said signal  $S_x$  is a maximum signal obtained.

Claim 4 (original): The method of claim 2 wherein said signal  $S_x$  is an average signal obtained between a plurality of position points.

Claim 5 (original): The method of claim 1 wherein said derived signal is a difference between  $S_x$  and  $S_B$ .

Claim 6 (currently amended): An endpoint method for chemical mechanical polishing, comprising:

providing a semiconductor wafer with a polish surface;

mounting said wafer adjacent a reference surface;

polishing said polish surface using a chemical mechanical polishing process;

sequentially exposing said polish surface and said reference surface to a light source;

at a first time  $t_{01}$  measuring a signal  $S_x$  from said polish surface;

at a second time  $t_1$  following  $t_{01}$  measuring a signal  $S_B$  from said reference surface;

deriving a signal  $S_{tx}$  given by  $S_{tx} = f(S_x, S_B)$  wherein said derived signal  $S_{tx}$  is a difference between  $S_x$  and  $S_B$ ; and

determining an endpoint of said chemical mechanical polishing process when the derived signal  $S_{tx}$  equals a predetermined level.

Claim 7 (canceled)

Claim 8 (original): The method of claim 7 wherein said signal  $S_x$  is a maximum signal obtained.

Claim 9 (original): The method of claim 7 wherein said signal  $S_x$  is an average signal obtained between a plurality of position points.

Claim 10 (canceled)

Claim 11 (canceled)